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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/591,966

09/07/2006

Robert Gilmour

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EXAMINER

BROWN, MICHAEL A

ART UNIT

PAPER NUMBER

3772

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/591,966	Applicant(s) GILMOUR, ROBERT	
	Examiner MICHAEL BROWN	Art Unit 3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 39-42 is/are rejected.
- 7) ☒ Claim(s) 23-38 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10-12, 21-22 and 39-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Gildersleeve.

Gildersleeve discloses in figures 1-2 an orthotic device comprising a support member 10, a resilient liner (118,120), connected to the support member adjacent the body portion, the resilient liner having a plurality of discrete liner segments (128a, 128b), at least one of the plurality of discrete liner segments is adapted to conform to the body portion (the leg), at least one of the plurality of discrete liner segments is removably attached to the support (via hook and loop fasteners), at least one of the plurality of discrete liner segments has an adjustable shape (air inside of the liner segments makes the shape adjustable or the amount of air inserted into the liner segment controls the shape), each of the pair of adjustable segments is individually adjustable (because they are separated from each other), the size of the plurality of discrete liner segments is adjustable (via the amount of air inserted therein), at least one the discrete liner segments is inflatable to provide the adjustable size, the plurality of discrete liner segment includes a micro-porous waterproof covering (elastomeric foam can be closed celled), the support member includes an upper cuff 24, hinged (at

26) to a lower cuff 26, the upper cuff is secured to the thigh, the lower cuff is secured to the calf, the hinge assembly is located proximate the knee joint of the user and the discrete liner segments is secured between the lower and upper cuffs.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gildersleeve in view of Kenney.

Gildersleeve discloses in figures 1-12 an orthotic device, substantially as claimed. However, Gildersleeve doesn't disclose an electrode portion operative connected to an electrical power. Kenney teaches in figures 1-27 an electrode 701, connected to an electrical power. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the electrode portion connected to an electrical power as taught by Kenney could be incorporated into Gildersleeve in order to impact therapeutic stimulation to the leg.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gildersleeve in view of Taylor.

Gildersleeve discloses in figures 1-12 an orthotic device, substantially as claimed. However, Gildersleeve doesn't disclose the support member being semi-rigid. Taylor teaches in figures 1-4 an orthotic comprising a frame (which includes support members)

that is made of a semi-rigid material. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the support member disclosed by Gildersleeve could be fabricated of a semi-rigid material as taught by Taylor in order to allow for the medical attendant to make adjustments to the support members.

Claims 13-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gildersleeve in view of Doyle, along with Cassford.

Gildersleeve discloses in figures 1-12 an orthotic device, substantially as claimed, that further comprises a rigid arm 12, having a hinge assembly 16, a cuff 24, a resilient liner (118, 120), having a plurality of discrete liners (108a, 108b), that is removable (via hook and loop). However, Gildersleeve doesn't disclose the cuff being semi-rigid, the cuff including a thermoplastic material and a deformable metallic material, the upper cuff having a first strap and the lower cuff having a second strap. Doyle teaches in figures 1-2 an orthotic comprising a cuff 10 that is made of a semi-rigid material 18. Cassford teaches in figures 1-6 an orthotic comprising an upper cuff 22 having a first strap 56, and a lower cuff 36 having a second strap 54. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the cuff disclosed by Gildersleeve could be fabricated of a semi-rigid material as taught by Doyle in order to be able to adjust the shape of the cuff. The first and second straps as taught by Cassford could be incorporated into Gildersleeve in order to use the straps to hold the cuffs to the user's leg. The thermoplastic material and a

deformable plastic could be a polyurethane and aluminum, wherein the polyurethane would provide comfort and the aluminum would be adjustable.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims above, and further in view of Kenny.

Kenny teaches in figures 1-27 an electrode 701, connected to an electrical power. It would have been obvious to one having ordinary skill in the art at the time that the invention was made that the electrode connected to an electrical power as taught by Kenny could be incorporated into Gildersleeve in order to impact therapeutic stimulation to the leg.

Allowable Subject Matter

Claims 23-38 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. No additional prior art was cited in this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL BROWN whose telephone number is (571)272-4972. The examiner can normally be reached on 5:30 am-4:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on 571-272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Brown/
Primary Examiner, Art Unit 3772